INSULATING MATERIALS

PRODUCT DATA

VARNISHES
1202
Insulating Varnish

Effective October 15, 1972
Supersedes issue dated January 22, 1971

MAY 18 1982

1202 INSULATING VARNISH

DPM 464

1202 is a clear air-drying insulating and finishing varnish designed for applications where oil, moisture and acid-resistant coatings are desired. This fast-drying, synthetic-resin type varnish is often used as a final coat over other varnishes, giving a hard, glossy protective coating. 1202 has excellent heat resistance and will operate as a finish coat at temperatures up to 145 C on apparatus which is not flexed. Although primarily an air-drying varnish, the oil, moisture, acid, and salt water resistance are greatly improved by baking. 1202 has excellent adhesion to most materials. It has excellent dip tank stability where the proper thinners are used.

Suggested Uses

1202 is suggested as a general-purpose insulating and finishing varnish for form-and random-wound coils, stators, armatures and most other types of electrical apparatus. It is excellent for giving an oil-resistant finish coating over inexpensive asphalt varnishes.

1202 has found many uses as a fast air-drying, general-purpose adhesive, protective coating, and insulating varnish. It is especially suggested for treating small windings where air drying or short baking cycles are required.

Product Details

Percent solids by weight	49-51%
Viscosity at 25 C (MacMichael), avg	300 cps
Solvent system	xylene
Specific gravity at 25 C, avg	0.98
Flash point, closed cup	80 F
Air drying time, 1-mil film, tack free, avg	1 hour

Typical Cured Film Properties

Dielectric strength—dry (ASTM D115-55)	2500 vpm
Dielectric strength—24 hrs in water	600 vpm
Chemical resistance	
Oil (Transil)	Excellent
Water	Good
Salt water	Good
Acid	Good
Alkali	Fair

Compatibility in Insulation Systems

1202 is compatible with systems using varnished cloth; cotton, rayon, Dacron* polyester fiber, nylon, and glass tapes; all types of laminates, slot liners, and slot wedges; mica and mica mat products; Irrathene† irradiated

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IMF-9A (50M)

BOE-C6-0208938

Compatibility in Insulation Systems (Continued)

polyethylene; Mylar* polyester film; oleoresinous and Formvar‡ wire enamels; polyester laminates and tubings; vinyl and acetate products; asbestos; metals; braided wires and cables; and most other materials found in electrical equipment.

Methods of Application

1202 insulating and finishing varnish may be applied by hot or cold dipping, brushing, or spraying.

1202 may be thinned to the desired viscosity for dipping or brushing with 1500 thinner or xylene.

For spraying applications, 1202 may be thinned to 25-30 seconds at 25 C in a No. 2 Zahn cup with 1500 thinner or xylene.

Air drying—thin films (about 1 mil) of 1202 will dry tack free in about one hour at room temperature. Thicker coatings or thick sections treated with 1202 may require from several hours to several days to dry properly.

Baking—baked films of 1202 are superior in physical and electrical properties, and in chemical resistance to air-dried films. Baking is suggested for heavy films and saturated structures.

Curing schedules—(These times apply to small units. For larger equipment the time for the part to reach the curing temperature should be added to these curing times.)

	100 C (212 F)	for	10-12	hours
or	110 C (230 F)	for	6-8	hours
or	125 C (257 F)	for	4-6	hours
or	150 C (302 F)	for	1-3	hours

Ordering Instructions

Address all orders or requests for additional technical information to your nearest GE sales engineer or franchised Insulating Materials Distributor or General Electric Company, Insulating Materials Department, 1 Campbell Road, Schenectady, New York 12306.

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